Amendments to the Specification

*On page 1, please amend paragraph* **[0001]** *as follows:*

**[0001]** This application claims the benefit of U.S. Provisional Application No. 60/305,036 filed July 11, 2001. This application is a continuation-in-part of U.S. Patent Application No. 10/192,023 filed July 10, 2002.

*On page 2, please amend paragraph* **[0010]** *as follows:*

**[0010]** The addition of a water-soluble carbonate and/or water-soluble bicarbonate to a high-density brine of sufficient salt content, *e.g.* zinc bromide, has been discovered to reduce the acidity of the zinc solution. The carbonates and/or bicarbonates are solid materials and are more conveniently and safely transported and added to the brines than are liquids or gases. Preferably, the additives herein are finely divided solids and/or powders. "Water-soluble" is defined herein as the dissolution of from about 0.1 wt.% to about 50 wt.% of the salt in question in water under ambient conditions. "Brine-soluble" has the same definition with respect to brines. The brines with which this invention is concerned are not saturated brines.

*On page 6, please amend paragraphs* **[0024]** *and* **[0025]** *as follows:*

**[0024]** Conventional drilling and/or completion fluid additives may, of course, be employed in the brine fluids of this invention, including, but not necessarily limited to, wetting agents, viscosifiers, suspending agents, weighting agents, shale stabilizers, filtration control additives, anti-balling additives, lubricants, seepage control additives, lost circulation additives, corrosion inhibitors, alkalinity control additives, thinners, dispersants, non-emulsifiers or demulsifiers, and the like. In other non-limiting embodiments of the invention, there are certain components that may be omitted from the brine fluids, that is, the brine fluids has an absence of these components which are of lesser importance, irrelevant or inapplicable to the invention or possibly deleterious in certain applications or circumstances. These less important, inert or perhaps deleterious components include viscosifiers

(including high area silica and biopolymers such as hydroxyethyl cellulose), suspension additives, alkaline buffers, polar additives, bridging agents, dissolved carbon dioxide ($CO_2$) and proppants. Polar additives include additives having a molecular weight less than about 400 and containing one or more polar groups per molecule such as hydroxyl, amino, and combinations thereof.

**[0025]** Optionally, one or more conventional corrosion inhibitors may be used in the brines of this invention to further improve their corrosion properties. In another non-limiting embodiment of the invention, the additives are used in the absence of other, added corrosion inhibitors, particularly phosphate, nitrite and/or amine corrosion inhibitors. For yet another non-limiting embodiment of the invention, the additives are used in the absence of an added Group VB metal (previous IUPAC notation), and particularly in the absence of added arsenic.

*On page 6, please add the following paragraphs after paragraph* **[0025]** *and before paragraph* **[0026]** *as follows:*

As previously noted, in one embodiment of the invention, the brine fluids of this invention will find application in the recovering of hydrocarbons, such as in situations where control of pressure in a well is needed, in one non-limiting embodiment. These brine fluids must meet certain other specifications and parameters that do not apply to brine fluids in general. For instance, high density brine fluids must have an acceptable true crystallization temperature (TCT) and an acceptable last crystal to dissolve (LCTD) temperature.

The TCT is a thermodynamic property that is the point at which crystals are formed at equilibrium. The LCTD temperature is a physical property reflecting the temperature at which the last crystal disappears. Both of these parameters are particularly important for high density brines that are used in offshore drilling where the brine is subjected to the relatively cold region of the sea water before the brine is pumped downhole. Both the TCT and the LCTD points are defined by the composition of the brine, not the density of the fluid. Fluids with the same density can have different TCT and LCTD values.

For instance, the following two fluids have the same density and specific gravity, but quite different TCT and LCTD points:

| | Fluid A – 3 salt mixture | Fluid B - 2 salt mixture |
|---|---|---|
| Density, lb/gal | 18 | 18 |
| Specific gravity | 2.161 | 2.161 |
| $CaCl_2$, wt% | 4.91 | – |
| $CaBr_2$, wt% | 27.9 | 23.8 |
| $ZnBr_2$, wt% | 39.8 | 42.8 |
| **TCT, °F** | **35** | **-2** |
| **LCTD, °F** | **47** | **-15** |

In one non-limiting embodiment of the invention, the corrosion resistant, high-density brines of this invention containing at least three salts, in a non-limiting example $CaCl_2$, $CaBr_2$ and $ZnBr_2$, have a TCT that ranges between about 80 to about 0°F, and in an alternate embodiment ranges between about 70 to about 5°F, and in still another non-limiting embodiment ranges between about 60 to about 10°F. Although the LCTD may fall into these same ranges for 3-salt brines, it will be appreciated, particularly from the above Fluids A and B, that the TCT and LCTD are not the same, and are in fact rarely the same. For high-density brines of this invention containing at least two salts, in a non-limiting example $CaBr_2$ and $ZnBr_2$, they may have a TCT that ranges between about -70 to about 20°F, and in an alternate embodiment ranges between about -65 to about 15°F. Again, the LCTD may fall into these same ranges for 2-salt brines, but is not necessarily the same value as the TCT.